TABLE OF CONTENTS

to Volume 87, September–December, 1977

ADLER, PAUL N. and CHARLES E. HOLT, Mutations increasing asexual plasmodium formation in *Physarum polycephalum* 401–420

BEAM, C. A., M. HIMES, J. HIMMELFARB, C. LINK and K. SHAW, Genetic evidence of unusual meiosis in the dinoflagellate *Crypthecodinium cohnii* 19–32

BECKENBACH, ANDREW T. and SATYA PRAKASH, Examination of allelic variation at the hexokinase loci of *D. pseudoobscura* and *D. persimilis* by different methods 743–761

BLEYMAN, LEA K. and PETER J. BRUNS, Genetics of cycloheximide resistance in Tetrahymena 275–284

BREWEN, J. G., H. S. PAYNE and I. D. ADLER, X-ray-induced chromosome aberrations in mouse dictyate oocytes. II. Fractionation and dose rate effects 699–708

BRYGOO, YVES, Genetic analysis of mating-type differentiation in *Paramecium tetraurelia* 633–653

BÜCHI, RUDOLF, Induced dominant lethal mutations and cytotoxic effects in germ cells of *Drosophila melanogaster* with Trenimon, PDMT and sodium monofluorophosphate 67–81

COYNE, JERRY A. and ALEXANDER A. FELTON, Genic heterogeneity at two alcohol dehydrogenase loci in *Drosophila pseudoobscura* and *Drosophila persimilis* 285–304

COBBS, GAGY and SATYA PRAKASH, An experimental investigation of the unit charge model of protein polymorphism and its relation to the esterase-5 locus of *Drosophila pseudoobscura*, *D. persimilis* and *D. miranda* 717–742

CLEAVER, JAMES E., Induction of thioguanine- and ouabain-resistant mutants and single-strand breaks in the DNA of Chinese hamster ovary cells by ^{3}H-thymidine 129–138

DAPKUS, D. and D. J. MERRELL, Chromosomal analysis of DDT-resistance in a long-term selected population of *Drosophila melanogaster* 685–697

DEBENEDICTIS, PAUL A., Studies in the dynamics of genetically variable populations. I. Frequency- and density-dependent selection in experimental populations of *Drosophila melanogaster* 343–356

EWENS, WARREN J. and GLENYS THOMSON, Properties of equilibria in multi-locus genetic systems 807–819

EWING, EVELYN P., Selection at the haploid and diploid phases: Cyclical variation 195–208

ELY, BERT and REID C. JOHNSON, Generalized transduction in *Caulobacter crescentus* .. 391–399

GILLESPIE, JOHN H., Multilocus behavior in random environments. II. Linkage disequilibrium in an additive model 569–579

HABER, JAMES E. and BARBARA GARVIK, A new gene affecting the efficiency of mating type interconversions in homothallic strains of *Saccharomyces cerevisiae* 33–50

HIRAIZUMI, YUICHIRO, The relationships among transmission frequency, male recombination and progeny production in *Drosophila melanogaster* 83–93

HOLMES, ROGER S., The genetics of α-hydroxy acid oxidase and alcohol dehydrogenase in the mouse: evidence for multiple gene loci and linkage between *Hao-2* and *Adh-3* 709–716

HOMYK, THEODORE, JR. and DAVID E. SHEPPARD, Behavioral mutants of *Drosophila melanogaster*. I. Isolation and mapping of mutations which decrease flight ability ... 95–104

HOMYK, THEODORE, JR., Behavioral mutants of *Drosophila melanogaster*. II. Behavioral analysis and focus mapping 105–128

JAMES, A. P. and B. J. KILBEY, The timing of UV mutagenesis in yeast: a pedigree analysis of induced recessive mutation 237–248

JOHNSON, D. L., Inbreeding in populations with overlapping generations 581–591

JOHNSON, G., Evaluation of the stepwise mutation model of electrophoretic mobility: Comparison of the gel sieving behavior of alleles at the esterase-5 locus of *Drosophila pseudoobscura* 139–157

KATO, TAKESI, ROBERT H. ROTHMAN and ALVIN J. CLARK, Analysis of the role of recombination and repair in mutagenesis of *Escherichia coli* by UV irradiation .. 1–18

KAUFMAN, PAMELA K., FRANKLIN D. ENFIELD and RALPH E. COMSTOCK, Stabilizing selection for pupa weight in *Tribolium castaneum* 327–341

KOHLI, JÜRG, HERBERT HOTTINGER, PETER MUNZ, ANDRE STRAUSS and PIERRE THURIAUX, Genetic mapping in *Schizosaccharomyces pombe* by mitotic and meiotic analysis and induced haploidization 471–489

KOVAL, THOMAS M., RONALD W. HART, WILLARD C. MYSER and WALTER F. HINK, A comparison of survival and repair of UV-induced DNA damage in cultured insects *versus* mammalian cells 513–518

LABARERE, JACQUES and JEAN BERNET, Protoplasmic incompatibility and self-lysis in *Podospora anserina*. I. Genetic investigations on mutations of a novel modifier gene that suppresses cell destruction 249–257
LALLEY, PETER A. and THOMAS B. SHOWS, Lysosomal acid phosphatase deficiency: Liver specific variant in the mouse 305–317
MCCOY, J. WYNNE, Linkage and genetic map length in *Tetrahymena thermophila* 421–439
METTLER, L. E., A. A. VOELKER and TERUMI MUKAI, Inversion clines in populations of *Drosophila melanogaster* 169–176
MITCHELL, JOYCE A., Fitness effects of EMS-induced mutations on the *X* chromosome of *Drosophila melanogaster*. I. Viability effects and heterozygous fitness effects 763–774
MITCHELL, JOYCE A. and MICHAEL J. SIMMONS, Fitness effects of EMS-induced mutations on the *X* chromosome of *Drosophila melanogaster*. II. Hemizygous fitness effects 775–783
MOFFA, A. M. and R. F. COSTANTINO, Genetic analysis of a population of Tribolium. VI. Polymorphism and demographic equilibrium 785–805
NIELSEN, J. T. and V. M. CHAPMAN, Electrophoretic variation for *X*-chromosome-linked phosphoglycerate kinase (PGK-1) in the mouse 319–325
NUR, UZI, Maintenance of a "parasitic" B chromosome in the grasshopper *Melanoplus femur-rubrum* 499–512
OGRYDZIAK, DAVID M. and ROBERT K. MORTIMER, Genetics of extracellular protease production in *Saccharomycopsis lipolytica* 621–632
OHNISHI, OHMI, Spontaneous and ethyl methanesulfonate-induced mutations controlling viability in *Drosophila melanogaster*. I. Recessive lethal mutations 519–527
OHNISHI, OHMI, Spontaneous and ethyl methanesulfonate-induced mutations controlling viability in *Drosophila melanogaster*. II. Homozygous effect of polygenic mutations 529–545
OHNISHI, OHMI, Spontaneous and ethyl methanesulfonate-induced mutations controlling viability in *Drosophila melanogaster*. III. Heterozygous effect of polygenic mutations 547–556
PARMA, DAVID H., G. THOMAS HEATH, CHIA-CHUNG CHE and J. L. ANNEST, Distribution and frequency of tandem duplications of the *rII* region of bacteriophage T4D 593–619
PRAKASH, SATYA, Allelic variants at the xanthine dehydrogenase locus affecting enzyme activity in *Drosophila pseudoobscura* 159–168
PRAKASH, LOUISE and SATYA PRAKASH, Increased spontaneous mitotic segregation in MMS-sensitive mutants of *Saccharomyces cerevisiae* 229–236
ROBBINS, LEONARD G., The meiotic effect of a deficiency in *Drosophila melanogaster* with a model for the effects of enzyme deficiency on recombination 655–684
ROBINOW, C. F., The number of chromosomes in *Schizosaccharomyces pombe*: light microscopy of stained preparations 491–497
RODERMEL, STEVEN and JOAN SMITH SONNEBORN, Age-correlated changes in expression of micronuclear damage and repair in *Paramecium tetraurelia* 259–274
SCHAFFER, HENRY E., DARREL G. YARDLEY and WYATT W. ANDERSON, Drift or selection: a statistical test of gene frequency variation over generations 371–379
STEWART, FRANK M. and BRUCE R. LEVIN, The population biology of bacterial plasmids: *a priori* conditions for the existence of conjugationally transmitted factors 209–228
SUBBARAO, SARALA K., B. S. KRISHNAMURTHY, C. F. CURTIS, T. ADAK and R. K. CHANDRAHAS, Segregation of cytoplasmic incompatibility properties in *Culex pipiens fatigans* 381–390
WASSERMAN, MARVIN and H. ROBERTA KOEPFER, Phylogenetic relationships among *Drosophila longicornis*, *Drosophila propachuca* and *Drosophila pachuca*, a triad of sibling species 557–568
WATT, WARD B., Adaptation at specific loci. I. Natural selection on phosphoglucose isomerase of Colias butterflies: Biochemical and population aspects 177–194
WICKNER, REED B., Deletion of mitochondrial DNA bypassing a chromosomal gene needed for maintenance of the killer plasmid of yeast 441–452
WICKNER, REED B. and MICHAEL J. LEIBOWITZ, Dominant chromosomal mutation bypassing chromosomal genes needed for killer RNA plasmid replication in yeast 453–469
WOLLENZIEN, PAUL, PAOLO BARSANTI and JOHN E. HEARST, Location and underreplication of satellite DNA in *Drosophila melanogaster* 51–65
YARDLEY, DARREL G., WAYTT W. ANDERSON and HENRY E. SCHAFFER, Gene frequency changes at the α-Amylase locus in experimental populations of *Drosophila pseudoobscura* 357–369